Pale Ale

- Gravity 11.9 BLG
- ABV 4.8 %
- IBU **30**
- SRM 4.1

Batch size

- Expected quantity of finished beer 20 liter(s)
- Trub loss 5 %
- Size with trub loss 21 liter(s)
- Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 25.3 liter(s)

Mash information

- Mash efficiency **75** %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 12 liter(s)
- Total mash volume 16 liter(s)

Steps

- Temp 68 C, Time 70 min
 Temp 78 C, Time 10 min

Mash step by step

- Heat up 12 liter(s) of strike water to 76C
- Add grains
- Keep mash 70 min at 68C
- Keep mash 10 min at 78C
- Sparge using 17.3 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.2 kg (80%)	100 %	5
Grain	Monachijski	0.6 kg <i>(15%)</i>	80 %	16
Grain	Bestmalz Carmel Pils	0.2 kg <i>(5%)</i>	75 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Phoenix	30 g	0 min	11 %
Boil	Progress	40 g	50 min	5.5 %
Boil	Warrior queen	10 g	50 min	6.2 %

Yeasts

Name	Туре	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	

Extras

Туре	Name	Amount	Use for	Time
Herb	mech irlandzki	5 g	Boil	50 min

Notes

· Wysładzać 15I wody w temp.80C

